2: Jochelson E-5 (1884-1902) 1933 Yakut

pairs of bellows are employed. Welding is not perfectly accomplished and traces of the process are visible. Nevertheless some native blacksmiths near Yakutsk have learned from Russian artisans the art of fluxing and tempering iron. From their own steel, they make files, axes, knives, spears, and other implements sufficiently hard, but they do not know how to forge springs. Until recently they did not know how to cut screws and to drill iron. Now they use Russian screw plates and the screw is called by the Russian name *bint* (in Russian *vint*) or *nuchasuola*, Russian path. Holes are pierced instead of being drilled. They do not know how to cast iron and call it by the Russian name, *djugun* (Russian, *chugun*). Knives made of native iron may be easily distinguished by their softness and flexibility from the hard knives of Russian manufacture.

It is of interest to note that the Tungus as well as the Yukaghir blacksmiths of Yakutsk Province now use the Yakut double bellows while the Tungus of the Okhotsk District use the single bellows of the Russians. The Tungus do not know how to obtain iron from ore and they forge Russian or Yakut iron rods.

Weapons and Tools. The bifurcated iron arrow point (*cȳra*) and the bifurcated bone arrow point (*muos cȳra*) are characteristic of the Yakut. The following are the iron weapons formerly used in war and hunting though at present they are restricted to hunting.

The *bolat*, an ancient iron sword, has a blade 14 cms. long, sharpened on one edge and curved in the direction of the point. The back is straight and thick, though somewhat thinner near the point. The sides are ornamented with engravings, inlaid with copper and brass. The name *bolat*, however, seems to be the ancient Russian word, *bulat*, for sword. The *bolat* has a short iron or bone handle.

The *batas* or war lance (Fig. 55*b*) has a blade about half a yard long; its greatest width is 1.5 inches. One edge is sharpened. The *batas* has a shaft of birch wood about 1.5 meters long. At present the *batas* is used in hunting bears. Like *bolat*, *batas* does not seem to be a Turkic word. It is known among the Russianized natives in Kamchatka and on the Kolyma River. I could not learn the original Yakut word for this weapon. The Yakut call a saber, *sābyla batas*, but *sābyla* is the Russian word (*sablya*) for saber.

A short, thick knife attached to a birch handle, *batyya*, the diminutive of *batas* is used in hunting and was formerly used in war. It was hung on the arm by a leather thong and regarded as a reserve weapon.

Of other Yakut iron implements the knife (*bysax*, from *bys*, to cut; Turkic, *bychak*) may be distinguished (Fig. 56*a*, *c*). It is not large, sel-

411
412

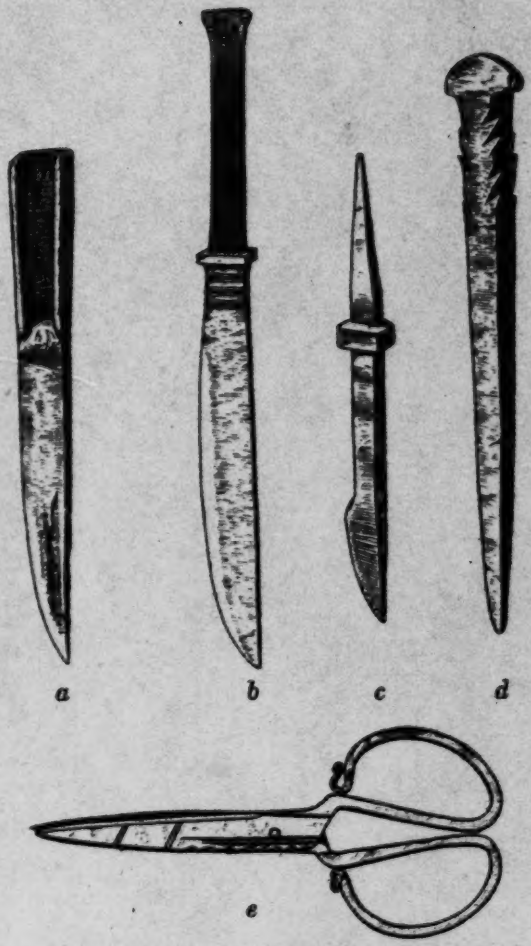
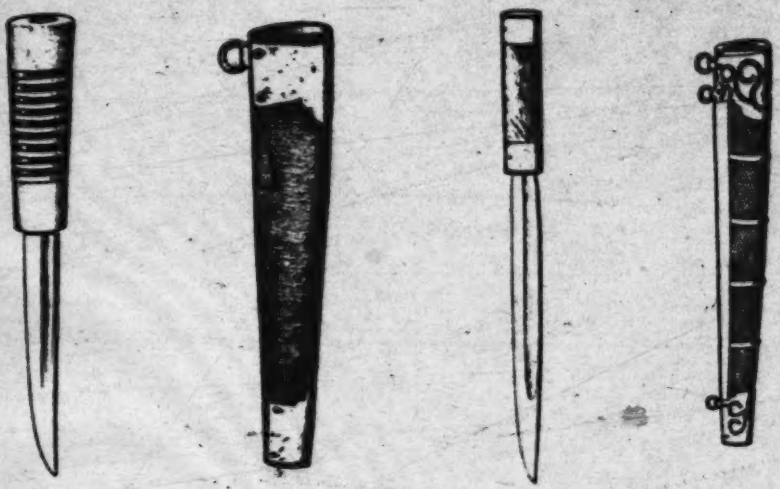


Fig. 55 (70-9302, 9644, 8791, 9305, 9157). Metal Tools. *a*, Ice pick head; *b*, War spear; *c*, Ice pick; *d*, Harrow tooth; *e*, Scissors.

2: Jochelson E-5 (1884-1902) 1933 Yakut

412

dom longer than four inches and wider than half an inch. Its back is blunt, straight, one quarter to five twelfths inch thick. The edge of the blade is slightly curved in the direction of the point. The left side is always ground off. Some of the Yakut smiths make a small groove on the side, near the bevelled edge. Knives similar to this one are not used in southern Siberia among the Buryat, other Mongols, or the Uriankhai, who use dagger-like knives. The haft is usually made in two halves attached to the knife; there are handles into which the tang of the knife



a *b* *c* *d*

Fig. 56 *a–d* (70-8092, 9313, 9192*a*, 9192*b*). Knives and Sheaths. *a*, Bone handled knife for general use. The incised handle is to insure a firm grip; *b*, Wooden knife case. The case is painted black and ornamented with two pieces of brass and at the left side has a brass ring for attachment to the belt; *c*, A large knife for cutting meat and splitting small pieces of wood; *d*, A wooden case for *c*. It is covered with decorated brass and provided with rings for tying it to the left leg above the knee.

is inserted. Old-fashioned people like to have large knives, *baday* (or *kyadajy*) *bysax*, two *xarys* (distance between the thumb and middle finger) long. There are other knives for special purposes: *sāry sūlār bysax*, a small knife about two inches long for wood carving; *iät bysax*, a two-edged small knife of soft iron, curved almost into a ring, used to make wooden dishes, goblets, mortars, ladles, spoons, etc.

Iron scissors are shown in Fig. 55*e*.

The ax (*sūgā*) has preserved its ancient shape. It is narrow, from 2.5 to 3 inches wide; its butt end is thin. An ax with a broad edge is called

2: Jochelson E-5 (1884-1902) 1933 Yakut

● 412

täräx sügä. The Yakut also use the adze for making dug-out canoes and troughs. The adze is called *adalha* or *chüöslä*, from the Russian *teslo*. A knife attached to a board for crushing brick tea and called *čai kyhar bysax* (Fig. 57) should also be mentioned.

Some typical iron implements are represented in the illustrations: In Fig. 36 may be seen a strike-a-light (*xatat*) of steel with a leather bag

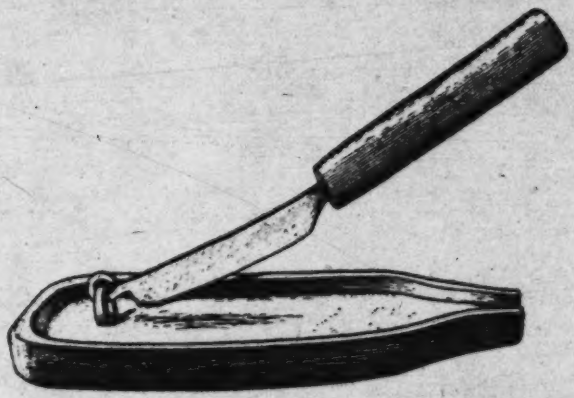


Fig. 57 (70–8780). Knife and Board for cutting Brick Tea.

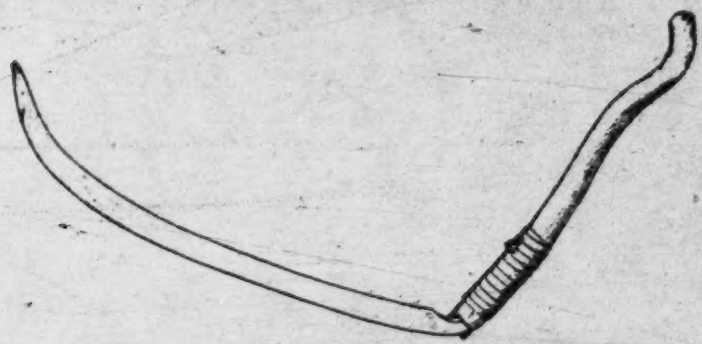


Fig. 58 (70–7691). Metal Scythe used by Russianized Natives at the Mouth of the Anadyr River.

for flint and tinder. Usually small pincers (*iskäx*) for extracting splinters or facial hair and an ear pick (*kulgax xasynar*) are attached. The *xatat* attached to the belt is worn by men as well as women.

The ancient belt (*timir kur*) was made of iron plates fastened to a strip of leather. Of other iron implements, the following may be mentioned: a spade (*xorūr*) and the sickle (*xotūr* or *saxa xotūra*) for cutting

2: Jochelson E-5 (1884-1902) 1933 Yakut

grass. The Yakut adopted the use of the scythe (*nūchcha xotūra*, Fig. 58) from Russian settlers. 412

Armor. Warriors used armor which consisted of small iron plates fastened to a leather coat and was called *kuyax*. The Chukchee and Koryak 713

Fig. 59

Fig. 60

411

Fig. 59 (70-8532). A Composite Double-Curved Bow, reinforced with Bark and Sinew.

Fig. 60 (70-8511). An Iron Hand and Arm Protector for use with a Bow.

iron armor described by Bogoras and myself was undoubtedly adopted from Yakut sources, perhaps through Tungus intermediaries. Formerly their armor consisted of bone plates fastened to the skin coat. Gmelin[1] says that the Kirghiz who, like the Yakut, are of Turkic origin had armor 713

[1]Gmelin, Johann Georg, *Voyage en Sibérie, Contenant la Description des Moeurs et Usages des Peuples de ce Pays, le Cours des Rivières considerables, la Situation des Chaines de Montagnes, des Grandes Forêts, des Mines, avec tous les faits d'Histoire Naturelle qui sont particuliers a cette contrée.* Traduction libre de l'Original allemand, par M. de Keralio. 2 vols. Paris, 1767.

2: Jochelson E-5 (1884-1902) 1933 RG Yakut (RV2)
SIBIRIAK (RR4)

ing a poor Yakut for money, but this incident did not come to the knowledge of the Russian administration.

Being vegetarians, the skoptsy kept horses for driving and farming and horned cattle for their milk and milk products. They kept birds for their eggs.

In 1904 the *skoptzy*, according to a manifesto from the Czar, were allowed to return to European Russia and, beginning in 1905, they started to leave Yakut Province, by villages. On their westward journey they told everywhere of their success in carrying on agriculture in Yakutsk Province. Many Russian peasants set out for Yakut Province to occupy the land of the *skoptzy*, but without their resources were unable to carry on their agricultural pursuits on the same scale

Yakut Agriculturists. The Yakut learned the technique of soil cultivation from the Russians from whom they also received seed. Their first sowing was in 1853 in the valley of the Maya River, thus it is only about seventy-five years since the native population became agriculturists. From that time, agriculture developed rapidly. In the first half of the eighteenth century about 400 to 450 acres were sown in Yakut Province; in 1891 over 16,000 acres, and in 1917, about 34,000 acres. It is interesting to note that three-fifths of the tilled land was cultivated by the Yakut.

The proportion of cereal plants sown was and remains almost constant. In the period between 1917 and 1925 barley occupied first place (from 46 to 59 per cent of the cultivated land), then followed spring and winter rye (from 30 to 39 per cent), spring wheat (from 6 to 13.6 per cent) and oats (from 1 to 5 per cent).

In addition to cereal plants, potatoes should be mentioned. In 1900–1910 these were grown on 700 acres. No other vegetables are cultivated by the Yakut. But Russians living in the suburbs of the cities grow many kinds of sweet herbs, onions, melons, watermelons, etc. The harsh winter of Yakutsk Province has its compensation in the warm summer, the abundant sunshine of its long clear days and the continentality of climate in general. Because of these climatic conditions, the possible period of plant growth is much shorter in Yakutsk Province (central and southern parts) than in countries lying much farther to the south. Thus the average maturation period for barley is seventy-one days, wheat, seventy-seven days, and spring rye, eighty days.

Agricultural methods are still primitive. Some Yakut continue to use the iron spade for tilling. Few possess iron plows; harrows with iron instead of wooden teeth are a great luxury.

6: Sauer--132-133 G-5 (1785-94) 1802 Yakut
116, 325, 412

"On my way thither, [RCH: to mount Tshebedal] I passed the night in one of the huts of a Yakut about 10 versts from the mountain, and observed there a small furnace with a pair of hand-bellows fixed, which were double, and gave a constant blast when worked with both hands. I saw some specimens of iron ore obtained in the neighborhood, exactly resembling that of the Vilui in curious forms and shapes. This iron my host worked into knives, palmas, hatchets, &c. without fusion, bringing it into a very soft state by heat, and beating it out. He used charcoal for this purpose, nor did he know, till I showed him, that the coals, which he called black stones, would burn; and he was inclined to think me a sorcerer for making [133] them inflammable. This mountain, however, afforded him grind-stones."

9: Stadling--92 E3 (1898) 1901 Yakut

116, 412

"The implements and mathods of agriculture are of course very primitive, wooden ploughs and harrows being exclusively used."

17: Erman--300-301 N-3 (1828-29) 1850 Yakut
116, 177, 412, 301, 174, 531

"Long before the Russians came here, the other tribes of Yakuts got from those at Vilui iron axes, awls, and tools for stripping and dressing the hides; together with copper ornaments for their clothes and harness and the metal plates which they, like the Ostyaks, sew on their girdles. But even now when they [301] make use of European guns, every man among them still exercises the skill peculiar to the nation, in making the great knife, or dagger, which is carried under the sanayakh at the waistband. The Yakutian steel is easily distinguished from the Russian, by its being somewhat flexible; and yet blades made of it will cut copper and pewter as easily as the best European blades. The wooden handle of the knife is always ornamented, after the original fashion, with tin work; from which it is evident that they procured the materials from Nerchinsk, before the Russians knew any thing of the metals in that quarter. They cut figures in the wood, and cast the tin into the hollow; a large knob of the metal left at the top of the knife-handle, is then shaped with the chisel. The sheaths of these Yakutian daggers are made of birch bark, and covered with black leather, on which, again, are metal mountings, with straight-lined patterns engraved on them. I had occasion, once before, to mention some decisive proofs of the influence which the Siberians of the furthest north exercised on the civilizations of the Yakuts. Here, on the other hand, certain handicrafts, characteristic of nomadic life, and, above all, the art of working metals, evidently point to a connexion with the tribes at present inhabiting the southern steppes and mountains. The physical character, also, and language of the Yakuts decide in favour of the same view."

37: Dobell--345 G-2 (1812-13) 1830 Yakut
116, 241, 412, 493

"During our morning's ride I stopped to see the Yakuts mow grass, which they performed as a man might cut wood in other countries, swinging a short dull scythe above their heads, and literally hewing it down by main strength. Mowing is, properly, a work done by sleight, as well as by strength, with a long sharp scythe, that enables an expert hand to lay down a couple of acres of grass in a day: and this should be explained to them. I observed their hay was drawn home by oxen, yoked to sledges, nearly after the European manner. Their horned cattle, in general, though not remarkably tall, are large, strong, and well proportioned; but the cows do not give a great deal of milk. The cattle here were larger and better than immediately in the neighbourhood of Yakutsk."

Birch bark, stone, wood, and bone are also still in use as material for the manufacture of tools. Skill and artistic taste reach the top in the combs carved of fossil ivory.

45: Lesseps--276-277 T-2 (1788) 1790 Yakut
116, 412

" In the woods [277] the trees that line the roads are small, but so bushy and so beset with briars, that my Yakouts were frequently obliged to clear the way with their hatchets, which still slackened our place, though we never went at a greater rate (1)

1. They use for this purpose a long and wide blade fastened at the end of a stick three feet long. This instrument serves them both as lance and axe.

than a walk."

53:Tokarev and Gurvich E-4 (no date) 1964
RV2 Yakut RV2

(Yakutskiy, Vilyuyskiy, and Olekminskiy Okrugs). An internal market was established and the development of economic ties speeded up the growth of national self-awareness. 175 648

Despite the cruel exploitation of the poorer Yakuts by the tsarist authorities and their own bourgeois-toyon hierarchy, the class struggle in Yakutiya up to 1890 was restricted to covert forms. But from this time the struggle of the ulus poor for land, possessed by the toyons, grew more and more intense. The growing discontent, however, was to some extent utilized by the toyons themselves, who were able by skilful maneuvering to direct the discontent away from themselves and toward the tsarist officialdom during the 1905-1906 revolution. In 1906 the toyons set up the Yakut Union—a bourgeois-nationalist organization, which did not last very long.

During the bourgeois-democratic revolution of 1917, the movement of the Yakut masses for liberation developed more deeply and widely. At first it was led predominantly by Bolsheviks (particularly in Yakutsk), but after the return of most of the political exiles to Russia (in May 1917), the counterrevolutionary groups of the toyons, who had joined forces with the Social-revolutionary-bourgeois section of the urban population, gained the upper hand.

The struggle for Soviet power in Yakutiya dragged on for a long time. It was only on June 30, 1918, that the Soviet regime was officially proclaimed for the first time in Yakutsk, and only in December 1919, after the liquidation of the Kolchak forces all over Siberia, that the Soviet regime was finally established in Yakutiya.

Pastoralism

Pastoralism has been the principal branch of Yakut economy for centuries, clearly distinguishing the Yakuts from the surrounding peoples. In Russian documents of the 17th century the Yakuts are sometimes called "the horse people." But both at that time and later, apart from horse-breeding, the principal form of Yakut economy was the breeding of cattle. These were distributed more evenly among the different classes of the population than horses, which were concentrated in the hands of the toyons. 231

During the 19th century, horse-breeding in Yakutiya gradually declined. At the end of the century, there were only 115,000-130,000 horses and 220,000-260,000 head of cattle. Apart from these types of livestock, the Yakuts also had dogs (both hunting dogs and watchdogs) and cats as domestic animals. In the northern regions, the Yakuts herded reindeer, like the Evenks. Other types of domestic animals such as sheep, goats, pigs, and also poultry were unknown before the arrival of the Russians, and were hardly to be found at all on Yakut farms right up to the Revolution.

With regard to methods of keeping cattle, the Yakuts had long practiced two basic systems—pasturing and stabling. The horses were left to graze both in the summer and (usually) in the winter; by no means was fodder always stored away for them and on many farms the horses had to dig it up with their hooves from under the snow throughout the winter. The Yakuts stored up hay as winter fodder for foals and cattle.

The Yakuts were familiar with mowing before the arrival of the Russians (the current opinion that the technique of mowing was acquired from the Russians is wrong), although it was evidently conducted on a smaller scale. Legend states that in ancient times bone scythes were used for mowing. But the Yakut scythe, which was retained until recently 412

(up to the beginning of the 20th century), is a humped iron scythe with a short, curved handle with which the grass was rather hewn (left and right) than mown. Later on this scythe was replaced by the Russian Lithuanian-type scythe and is never used nowadays. The Yakuts mowed the grass in the alasy and river valleys, gathering the hay into small sheaves, in which it often became soaked and rotted away, hence the quality of the hay was not usually very high.

In the winter, the cattle were kept in cold, dark and crowded khotons, which were usually built under the same roof as the dwelling; the animals were usually herded into the khoton only at night, while in the daytime they were left outside, in the frost. When there was a lack of hay, the cattle had little to eat, and were watered with icy water from a hole in the ice. The austere conditions under which the cattle were kept and the cold climate made them hardy, but unproductive. The Yakut cow yielded an average of 60 buckets of milk a year, and for two or three months in the winter was left unmilked. The mares were only milked in the summer, as a general rule.

Both the cattle and the horses were utilized in much the same way: they gave milk, meat, and hides, and served for transportation (oxen were usually harnessed to carts, while horses were ridden, or carried packs).

The predominance of pastoralism involved preservation of the semi-nomadic way of life. Until recently the Yakuts retained the custom of moving twice a year—round about May and October—from the winter to the summer camps, and back again. The winter dwellings were usually set up near the mowings, while the summer dwellings (which, incidentally, were comparatively close by the former) were built close to the pasture-lands.

Fishing, Hunting and Agriculture

The second branch of economy in importance was fishing. There was a tremendous amount of carp and a small fish called mundu in the abundant lakes, and coregonus muksun, white salmon and so on were plentiful in the rivers. For the poor people who had no cattle, fishing had long been a main occupation; the expression balyksyt (fisherman) is used in documents of the 17th century in the sense of "a poor man." At the same time, there were actually complete tribal groups who seem to have lived chiefly by fishing. These were the so-called "foot clans" of the Yakuts (Osekui, Ontuls, Kokui, Kiriks, Kyrgydays and Orgots). These tribes, who were clearly a remnant of the very ancient prepastoral population, were first discovered in the 17th century by Russians on the Vilyuy. For the Yakut pastoralists, fishing was an essential subsidiary occupation and has retained its importance until our own day.

The fish were caught chiefly in the summer, but there was also fishing through the ice during the wintertime. Use was made of seines which were chiefly made of horsehair, smaller nets, and sack-nets, etc. In the autumn there was usually collective fishing with a large seine, and the catch was divided among all those taking part, in accordance with ancient custom.

There is a hypothesis (V. L. Seroshevskiy) that Yakut fishing was only recently borrowed from the Evenks and Russians. In actual fact, fishing is the oldest form of economy among the population of the Lena region, including the ancestors of the Yakuts.

Hunting is the third, though far less important, branch of Yakut economy. Just like fishing, it goes back to very ancient times. During the

53:Tokarev and Gurvich E-4 (no date) 1964
RV2 Yakut RV2

276
412
323
276
442
415

Utensils: 1—clay pots; 2—pipe; 3—scissors; 4—curved knife for making wooden vessels; 5—wooden pipe; 6—wooden holder for teacups.

articles from birchbark take first place. The tools used for wood-working,—the axe, knife, drill, and so on—were improved and made more intricate under the influence of the Russians. 322

Wooden and birchbark utensils, crockery, furnishings and various other small objects were of great variety and were artistically and

233 binding) [Figure 2h-i]. A man never uses a female knot to tie a
284 reindeer, for he would be laughed at if he did. They tie the rein-
[412] deer to trees or bushes; in those places where there are no trees
or bushes--for example, on the hilltops--the reindeer are tied to special wooden pegs--the kojnos--about forty or fifty centimeters in length, which are stuck into the ground and which at the same time serve as digging sticks for unearthing edible roots [Fig. 2e].

233 In summer the Dolgan ride reindeer, and only their "twigs"
492 (boats) are carried on special sledges with two crossbars; in winter, however, they ride on sleds exclusively. [189] According to the stories, in ancient times they rode only reindeer both summer and winter and borrowed the sledge gear later from the Tavgi.

The reindeer harness is in reality not as simple as it would appear at first glance; and incidentally, in all the Russian ethnographic literature we do not have anything like a complete description of it. If someone who knew nothing of the ways of harnessing reindeer were to take it into his head to hitch one up [Fig. 3] according to the descriptions found in the available literature, he would find out that he was quite helpless. Any ethnographic description can be completely scientific only if by following it one could completely and precisely duplicate the described event or object, and it is our task to strive toward this end with all possible efforts. To give a detailed description of the Dolgan winter reindeer harness means to give a description of the harness which is the most widespread at the present time in the north, starting from Scandinavia and extending to the eastern tip of Asia, excluding the Paleo-Asiatics. Such insignificant variations among the separate peoples who live in the aforementioned territory as, for example, the fact that the Nenets and the Tavgi steer from the left side while the Dolgan steer from the right side, and other minor details, do not change the general construction of the summer and winter harnesses of the reindeer.

The bast' ŋa--the halter used for riding a reindeer [Fig. 2k] consists of a strap sewn together in the form of a circle and placed on the forehead; fastened to its sides are two small straps made of reindeer hide [Fig. 2e-m] by means of which the halter is fastened at the back of the head; to the lower part is sewn a strap called njuogu--a small rein for guiding the reindeer [Fig. 2n]. The halters
[531] of female reindeer, the reindeer used as pack animals, and the "shaytan'i" riding reindeer (1) have the part over the forehead

1. "Shaytan'i" riding reindeer are reindeer on which are